

# CD41a Monoclonal Antibody (eBioMWRReg30 (MWRReg30)), eBioscience™

Product Details	
Size	50 µg
Species Reactivity	Mouse
Published Species	Hamster, Mouse, Human
Host/Isotype	Rat / IgG1, kappa
Class	Monoclonal
Type	Antibody
Clone	eBioMWRReg30 (MWRReg30)
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_763491

Applications	Tested Dilution	Publications
Western Blot (WB)	-	1 Publication
Immunohistochemistry (IHC)	-	5 Publications
Immunohistochemistry (Frozen) (IHC (F))	-	2 Publications
Immunocytochemistry (ICC/IF)	-	7 Publications
Flow Cytometry (Flow)	0.25 µg/test	35 Publications
ELISA (ELISA)	Assay-Dependent	-
Immunoprecipitation (IP)	Assay-Dependent	1 Publication
Functional Assay (FN)	Assay-Dependent	1 Publication
Peptide Array (Array)	-	1 Publication

## Product Specific Information

Description: The eBioMWRReg30 monoclonal antibody reacts with mouse CD41 (fibrinogen receptor, gpIIb, integrin alpha IIb). While initially thought to be expressed exclusively on the surface of platelets and megakaryocytes, it has been demonstrated that CD41 is also expressed on hematopoietic progenitors in the embryo, fetus and adult. CD41 associates with CD61 (gpIIIa, integrin beta III) to form a receptor which plays a major role in platelet function, including binding of several adhesion molecules such as fibrinogen, fibronectin and vitronectin.

Recently, the SLAM-family markers, CD48 and CD150 have been used to reliably identify hematopoietic stem cells (HSC).

Specifically, it was found that CD150+CD48- bone marrow cells were highly efficient in their ability to confer long-term multi-lineage reconstitution in irradiated mice. Furthermore, the efficiency of reconstitution was enhanced when HSCs were further enriched through the exclusion of CD41+ cells. Thus, the use of CD150+CD48-CD41- as an expression profile efficiently identifies hematopoietic stem cells.

**Applications Reported:** This eBioMWRReg30 (MWRReg30) antibody has been reported for use in flow cytometric analysis, immunoprecipitation, and ELISA.

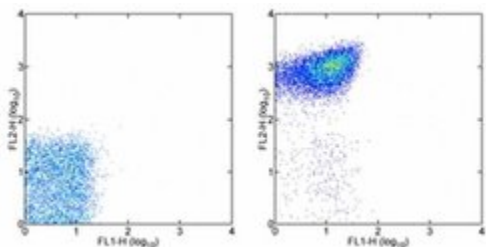
**Applications Tested:** This eBioMWRReg30 (MWRReg30) antibody has been tested by flow cytometric analysis of mouse platelets. This can be used at less than or equal to 0.25 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

**Purity:** Greater than 90%, as determined by SDS-PAGE.

**Aggregation:** Less than 10%, as determined by HPLC.

**Filtration:** 0.2 µm post-manufacturing filtered.

## Product Images For CD41a Monoclonal Antibody (eBioMWRReg30 (MWRReg30)), eBioscience™



### CD41a Antibody (14-0411-81) in Flow

Staining of mouse platelets with 0.125 µg of Rat IgG1 Isotype Control Purified (Product # 14-4301-82) (left) or 0.125 µg of Anti-Mouse CD41 Purified (right) followed by Anti-Rat IgG PE (Product # 12-4822).

[View more figures on thermofisher.com](https://www.thermofisher.com)

## Western Blot (1)

Nature

### A directional switch of integrin signalling and a new anti-thrombotic strategy.

"Published figure using CD41a monoclonal antibody (Product # 14-0411-82) in Flow Cytometry"

Authors: Shen B,Zhao X,O'Brien KA,Stojanovic-Terpo A,Delaney MK,Kim K,Cho J,Lam SC,Du X

Species  
Hamster

Dilution  
Not Cited

Year  
2013

## Immunohistochemistry (5)

The EMBO journal

### Transcriptome-based profiling of yolk sac-derived macrophages reveals a role for Irf8 in macrophage maturation.

"14-0411 was used in Immunohistochemistry-wholemount to study the cellular and molecular mechanisms which govern the origin and developmental pathways of tissue macrophages."

Authors: Hagemeyer N,Kierdorf K,Frenzel K,Xue J,Ringelhan M,Abdullah Z,Godin I,Wieghofer P,Costa Jordão MJ,Ulas T,Yorgancioglu G,Rosenbauer F,Knolle PA,Heikenwalder M,Schultze JL,Prinz M

Species  
Mouse

Dilution  
Not Cited

Year  
2016

Development (Cambridge, England)

### Runx1 is required for progression of CD41+ embryonic precursors into HSCs but not prior to this.

"Published figure using CD41a monoclonal antibody (Product # 14-0411-82) in Flow Cytometry"

Authors: Liakhovitskaia A,Rybtsov S,Smith T,Batsivari A,Rybtsova N,Rode C,de Bruijn M,Buchholz F,Gordon-Keylock S,Zhao S,Medvinsky A

Species  
Mouse

Dilution  
Not Cited

Year  
2014

[View more IHC references on thermofisher.com](#)

## Immunohistochemistry (Frozen) (2)

Nature communications

### Cathelicidins prime platelets to mediate arterial thrombosis and tissue inflammation.

"14-0411 was used in Immunohistochemistry-immunofluorescence to understand the role of cathelicidin LL-37 in thrombosis and tissue inflammation."

Authors: Pircher J,Czermak T,Ehrlich A,Eberle C,Gaitzsch E,Margraf A,Grommes J,Saha P,Titova A,Ishikawa-Ankerhold H,Stark K,Petzold T,Stocker T,Weckbach LT,Novotny J,Sperandio M,Nieswandt B,Smith A,Mannell H,Walzog B,Horst D,Soehnlein O,Massberg S,Schulz C

Species  
Mouse

Dilution  
Not Cited

Year  
2018

## More applications with references on thermofisher.com

ICC/IF (7)

Flow (35)

IP (1)

FN (1)

Array (1)

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